

Method And Apparatus For Providing An Integrated Active Region On Silicon-On-Insulator Devices

ABSTRACT OF THE DISCLOSURE

A method and apparatus for providing integrated active regions on silicon-on-insulator (SOI) devices by oxidizing a portion of the active layer. When the active layer of the SOI wafer is relatively thick, such as about 200 Å to 1000 Å or greater, the etching process partially removes the active layer. The remaining active layer is oxidized prior to a wet dip for removing the mask layer, preventing the wet dip process from undercutting the active region. When the active layer of the SOI wafer is relatively thin, such as about 25 Å to 400 Å, the partial etching step may be reduced or eliminated. In this case, the active layer is oxidized with little or no etching of the active layer. The exposed active layer is oxidized to prevent the wet dip process from undercutting the active region.